1/8

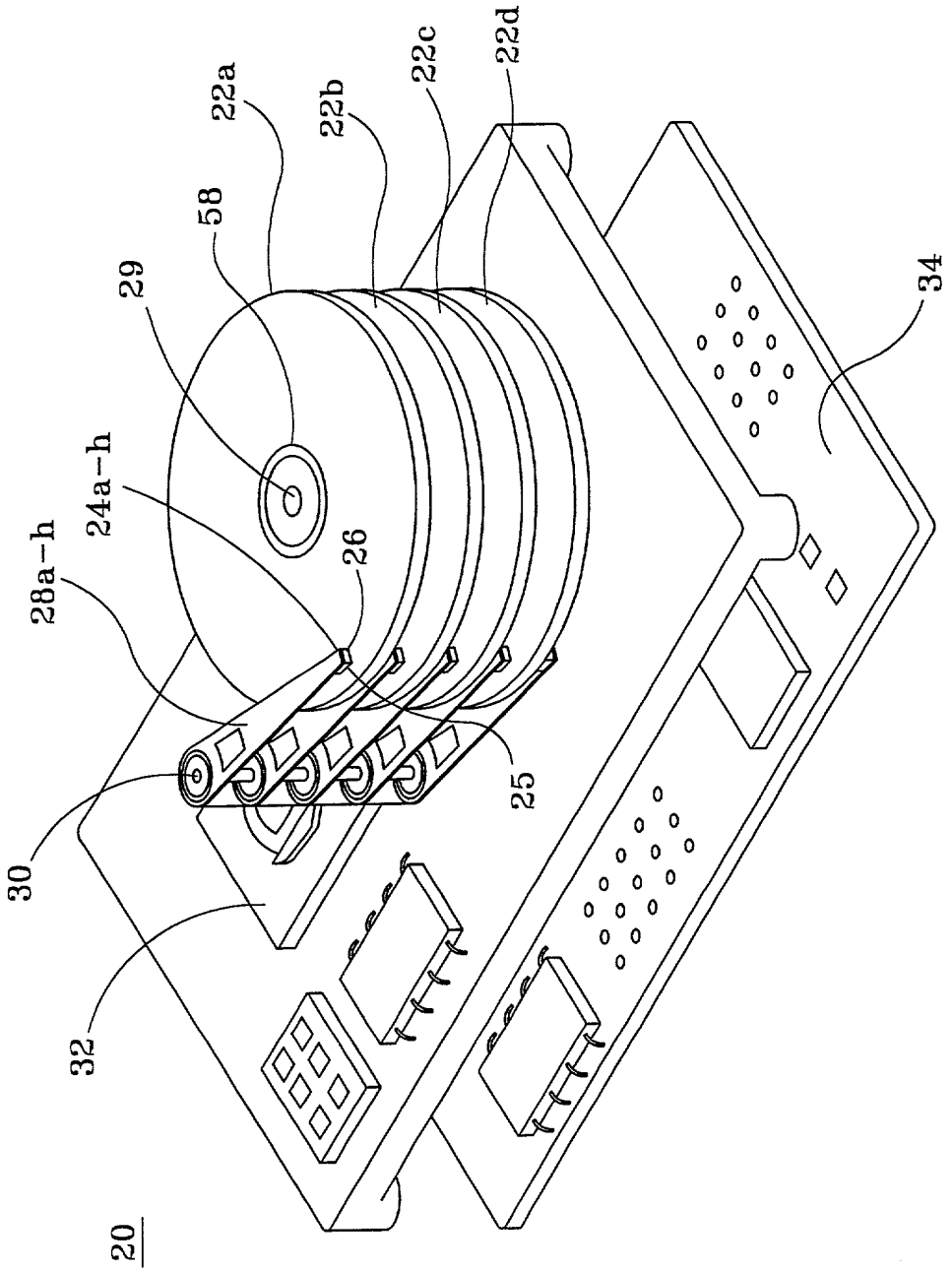

Figure 1

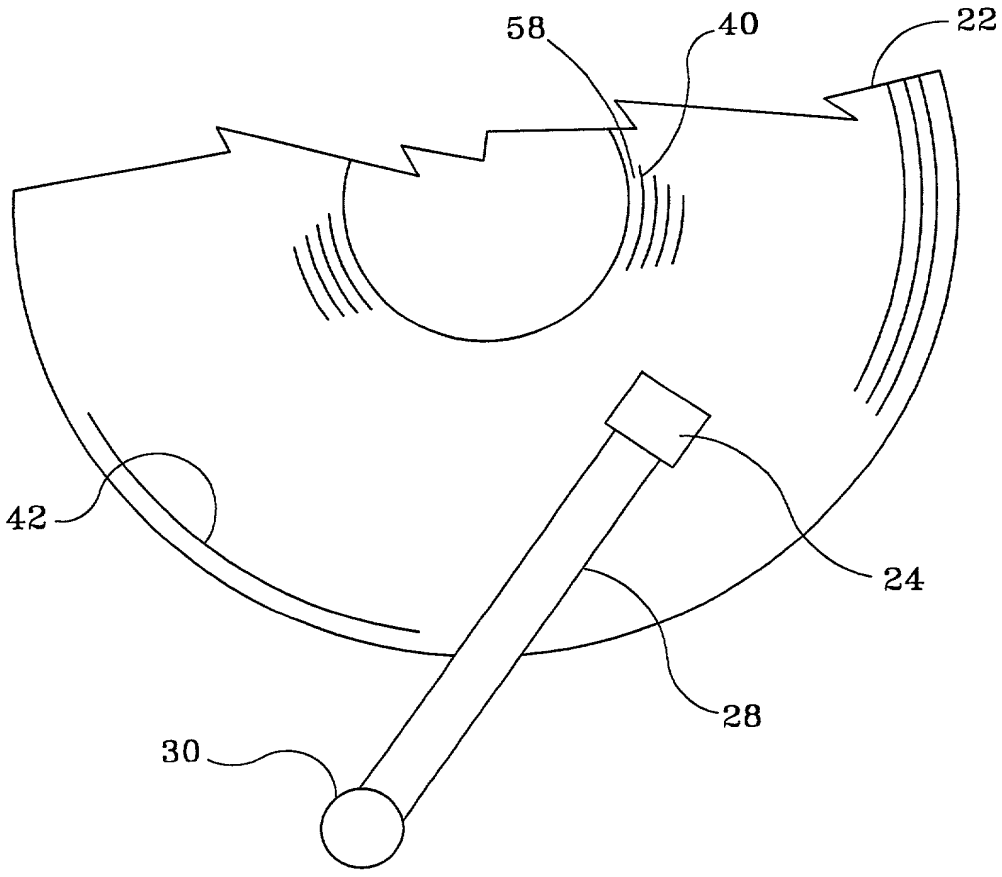

Figure 2

3/8

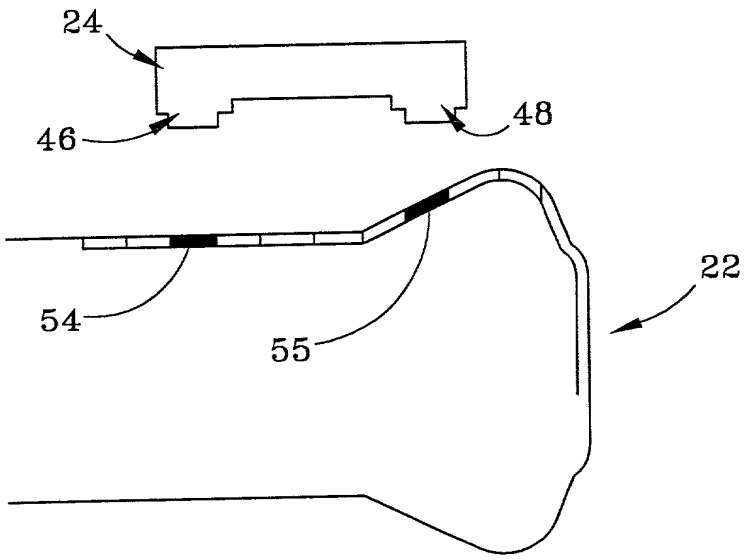

Figure 3A

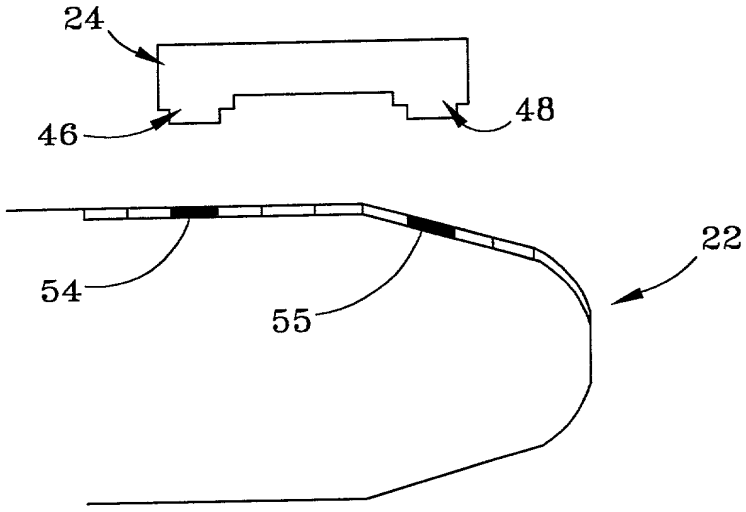

Figure 3B

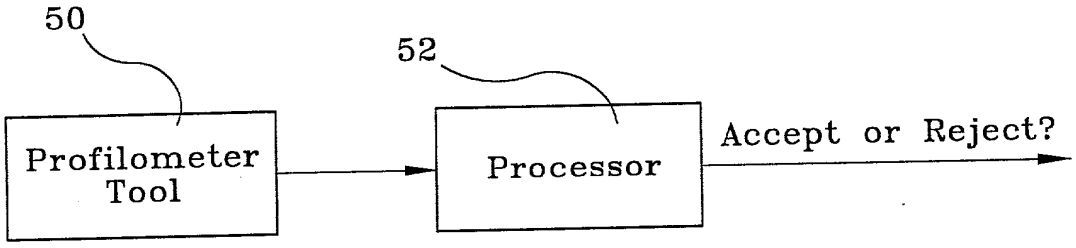

Figure 4

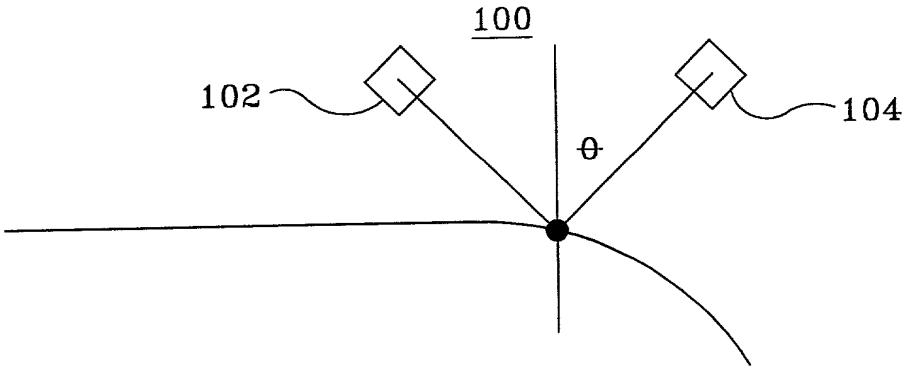

Figure 5A

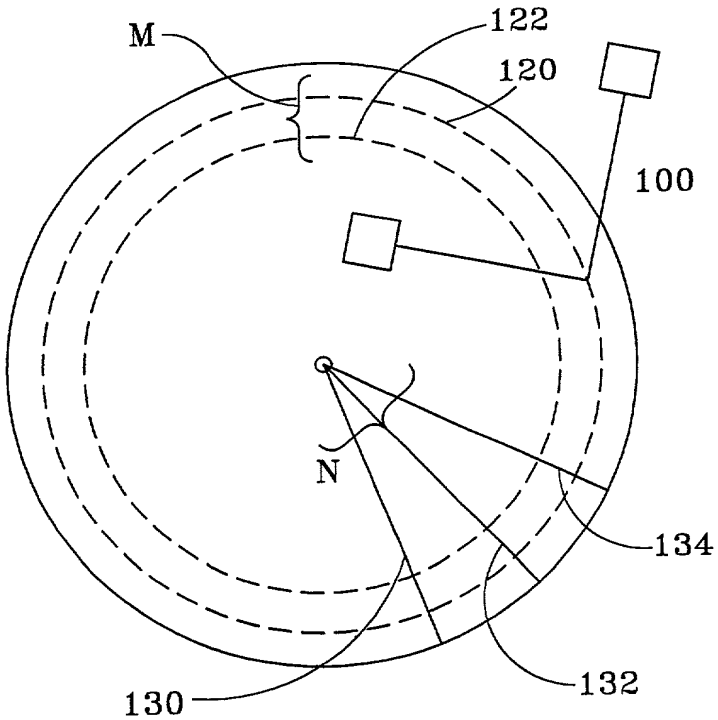

Figure 5B

5/8

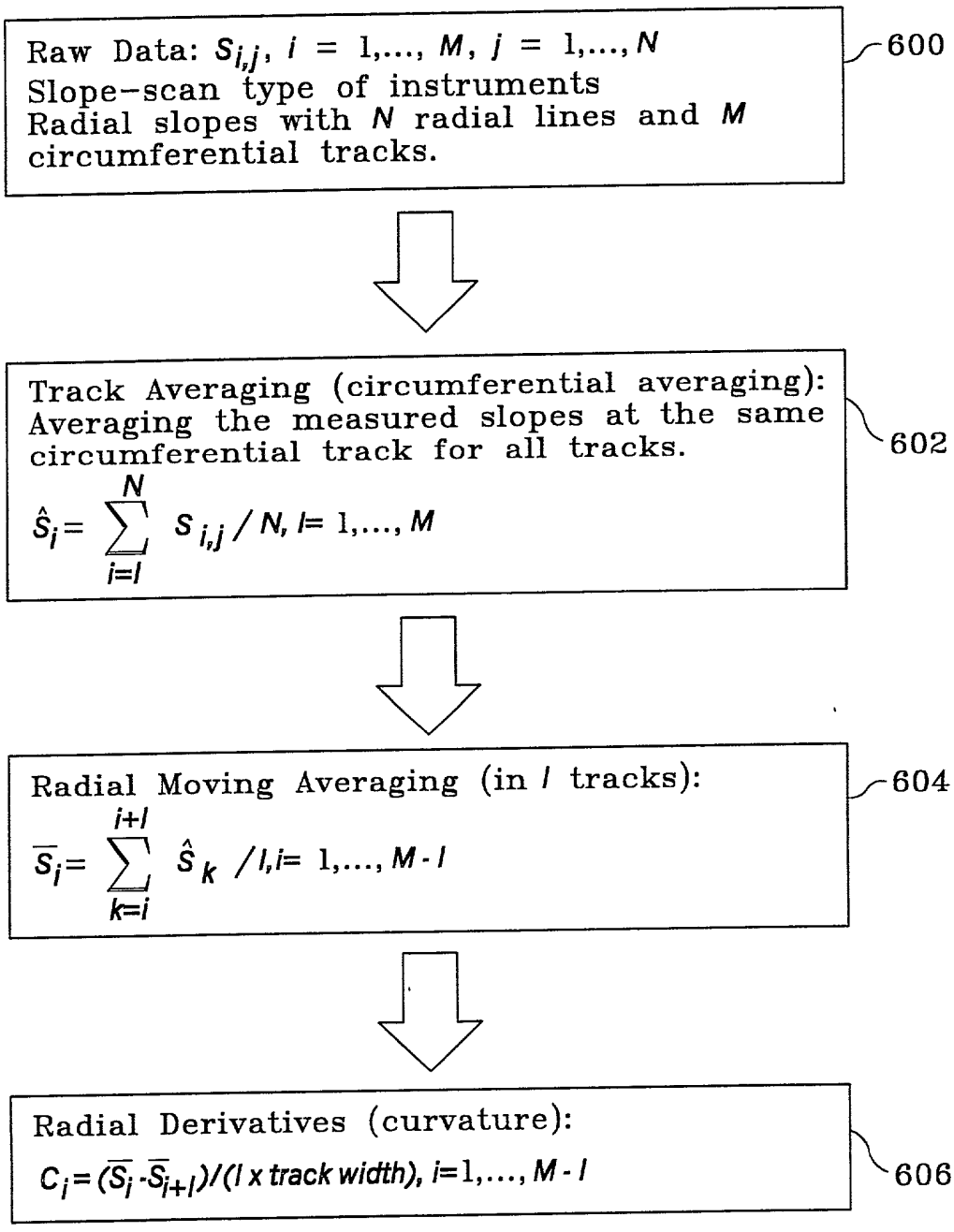
Raw Data: $S_{i,j}$, i = 1,..., M, j = 1,..., N
Slope-scan type of instruments
Radial slopes with N radial lines and M circumferential tracks.
600
Track Averaging (circumferential averaging): Averaging the measured slopes at the same circumferential track for all tracks.
$\hat{S}_i = \sum_{i=l}^{N} S_{i,j} / N, l = 1,..., M$
602
Radial Moving Averaging (in l tracks):
$\overline{S}_i = \sum_{k=i}^{i+l} \hat{S}_k / l, i = 1,..., M - l$
604
Radial Derivatives (curvature):
$C_i = (\overline{S}_i - \overline{S}_{i+l})/(l \times \text{track width}), i = 1,..., M - l$
606

Figure 6

6/8

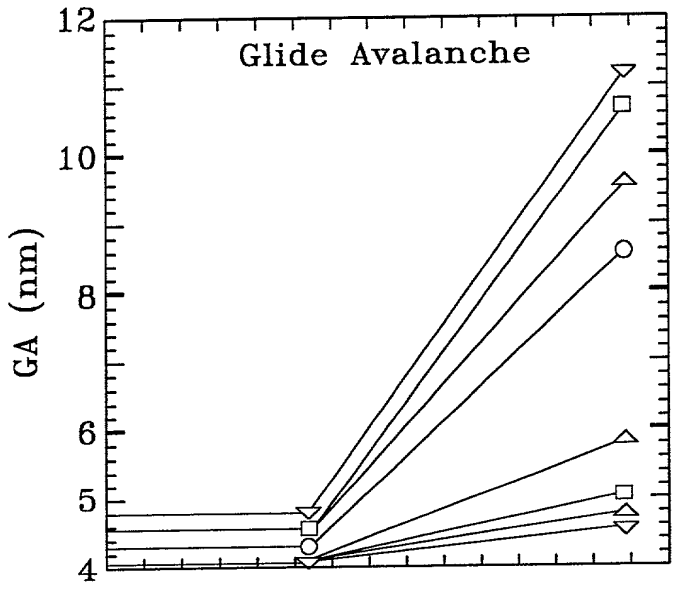

Figure 7A

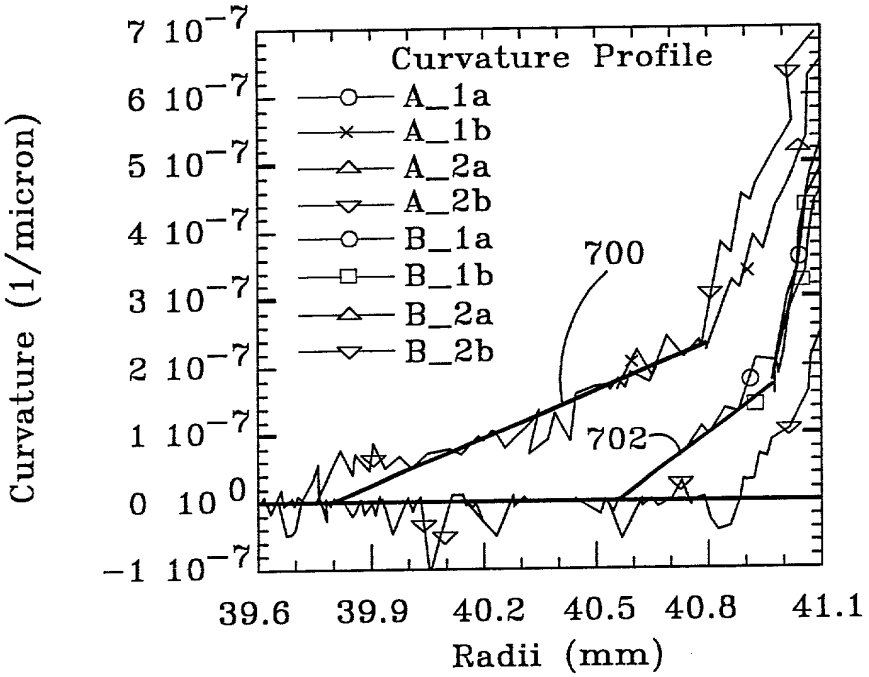

Figure 7B

Fly Height (nm)		11.4	10.2	8.9	7.6
cell 1 glide radii (mm)	c1_1	47.04	46.99	46.91	46.81
	c1_2	47.02	46.96	46.89	46.79
	c1_3	46.99	46.94	46.86	46.74
	c1_4	47.02	46.96	46.89	46.81
	cl_5	47.04	46.99	46.91	46.81
	cell1 avg.	47.02	46.97	46.89	46.79
cell 2 glide radii (mm)	c2_1	47.04	47.04	47.07	46.96
	c2_2	47.12	47.12	47.04	46.94
	c2_3	47.12	47.12	47.04	46.94
	c2_4	47.12	47.12	47.07	46.99
	c2_5	47.12	47.12	47.09	46.99
	cell2 avg.	47.10	47.10	47.06	46.96
cell 3 glide radii (mm)	c3_1	47.22	47.14	47.07	46.91
	c3_2	47.24	47.17	47.09	46.94
	c3_3	47.17	47.09	46.99	46.86
	c3_4	47.29	47.27	47.22	46.14
	c3_5	47.32	47.29	47.24	46.17
	cell3 avg.	47.25	47.19	47.12	47.01
cell 4 glide radii (mm)	c4_1	47.22	47.22	47.17	47.04
	c4_2	47.22	47.17	47.09	46.96
	c4_3	47.17	47.02	47.02	46.99
	c4_4	47.22	47.22	47.17	47.04
	c4_5	47.27	47.24	47.22	47.12
	cell4 avg.	47.22	47.17	47.13	47.03

Figure 8

8/8

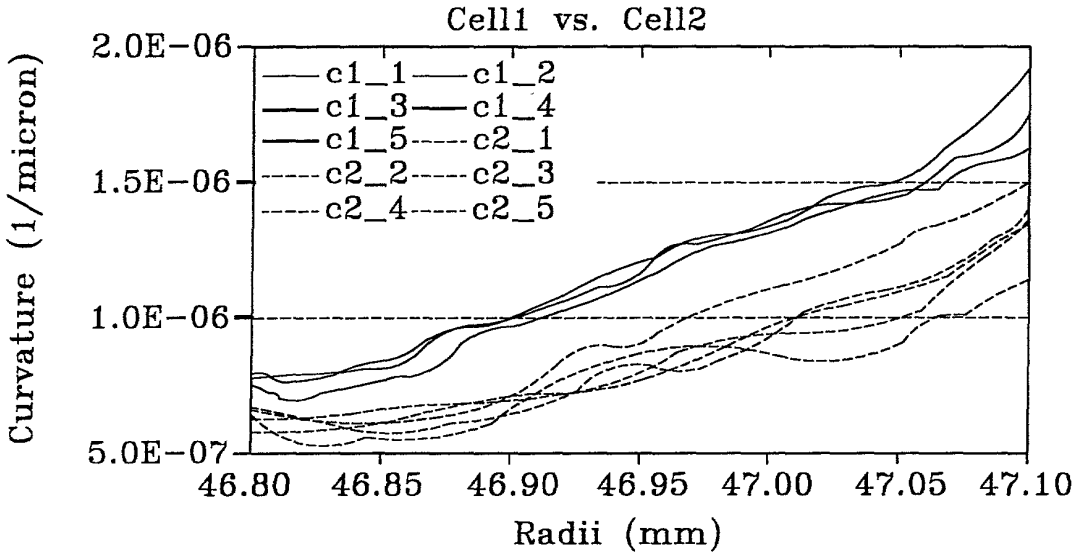

Figure 9A

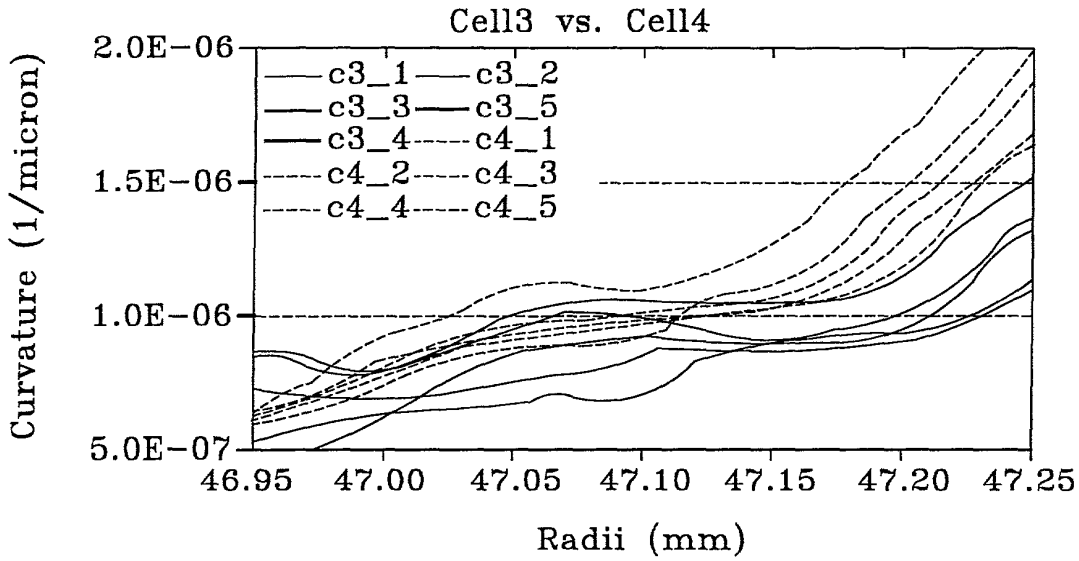

Figure 9B